PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference BP110912 | | CT/ISA/220 oplicable, item 5 below. | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--|--|--|
| International application No. | International filing date (day/month/year) | (Earliest) Priority Date (day month year) | | | |
| PCT/FI 2005/000045 | 21 January 2005 | 23 January 2004 | | | |
| Applicant | | | | | |
| ENVIRONICS OY et al | | | | | |
| This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau. | | | | | |
| This international search report cons | ists of a total of 3 sheets. | • | | | |
| It is also accompanied by a copy of each prior art document cited in this report. | | | | | |
| 1. Basis of the report | • | | | | |
| a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. | | | | | |
| The international se furnished to this Au | The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)). | | | | |
| b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I. | | | | | |
| 2. Certain claims were found unsearchable (see Box No. II) | | | | | |
| 3. Unity of invention is lacking (see Box No. III) | | | | | |
| 4. With regard to the title, | | · | | | |
| the text is approved as su | bmitted by the applicant. | | | | |
| the text has been establis | the text has been established by this Authority to read as follows: | | | | |
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| 5. With regard to the abstract, | | | | | |
| the text is approved as submitted by the applicant. the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority. | | | | | |
| 6. With regard to the drawings, | | | | | |
| | a. the figure of the drawings to be published with the abstract is Figure No. | | | | |
| as suggested by the | •• | | | | |
| | as selected by this Authority, because the applicant failed to suggest a figure. | | | | |
| | as selected by this Authority, because this figure better characterizes the invention. | | | | |
| b. none of the figures is to be published with the abstract. | | | | | |

International application No.

PCT/FI 2005/000045

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G01N 30/02, B01D 53/10, B01D 63/02
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G01N, B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, CAPLUS, INSPEC, COMPDX

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | |
|-----------|------------------------------------------------------------------------------------------------------------------------|-----------------------|--|
| A | EP 0369769 A2 (HOECHST CELANESE CORPORATION), 23 May 1990 (23.05.1990), page 2, line 31 - page 3, line 18, claims 1-11 | 1-22 | |
| A | US 5160625 A (JAN Å. JÖNSSON ET AL), 3 November 1992 (03.11.1992), column 2, line 13 - line 44 | 1-22 | |
| A | US 5856616 A (WALEED M. MASWADEH ET AL), 5 January 1999 (05.01.1999), column 2, line 14 - line 65 | 1-22 | |
| | | | |

| X | Further documents are listed in the continuation of Box | C. | X See patent family annex. | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| * | Special categories of cited documents: | "T" | later document published after the international filing date or priority | |
| "A" document defining the general state of the art which is not considered to be of particular relevance | | | date and not in conflict with the application but cited to understand the principle or theory underlying the invention | |
| "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means | | "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive | | |
| | | | step when the document is taken alone | |
| | | "Y" | | |
| | | | considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | |
| "P" | document published prior to the international filing date but later than the priority date claimed | *&* | | |
| Date | e of the actual completion of the international search | Date | of mailing of the international search report | |
| 10 | May 2005 | | 1 1 -05- 2005 | |
| Nan | ne and mailing address of the ISA/ | Autho | rized officer | |
| Swedish Patent Office | | | | |
| Box 5055, S-102 42 STOCKHOLM | | Lar | s Wallentin/MP | |
| Facsimile No. +46 8 666 02 86 | | Telepl | none No. + 46 8 782 25 00 | |

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2005/000045

| | 101/11 200 | J, 0000 18 |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| C (Continu | nation). DOCUMENTS CONSIDERED TO BE RELEVANT | |
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No |
| A | Journal of Chromatography A, 842 (1999) 115-142; Zhenghua Ji et al; "POROUS LAYER OPEN-TUBULAR CAPILLARY COLUMNS: PREPARATIONS, APPLICATIONS AND FUTURE DIRECTIONS"; see section 1, 2.1 | 1-22 |
| A | EP 1203953 A2 (SHINWA CHEMICAL INDUSTRIES LTD.), 8 May 2002 (08.05.2002), section 0029-0040 | 1-22 |
| | | |
| A | File EPODOC/EPO, FUJIKURA LTD: "Multi-Capillary Column" JP61265567 A, 19861125 | 1-22 |
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INTERNATIONAL SEARCH REPORT

Information on patent family members

01/04/2005

International application No. PCT/FI 2005/000045

| EP | 0369769 | A2 | 23/05/1990 | AT 94079 T 15/09/1993 CA 2002370 A 15/05/1990 DE 68909007 D,T 05/01/1994 DK 569189 A 16/05/1990 JP 2187659 A 23/07/1990 JP 2609335 B 14/05/1997 KR 9308108 B 26/08/1993 NO 894414 A 16/05/1990 US 4957620 A 18/09/1990 |
|----|---------|----|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| US | 5160625 | A | 03/11/1992 | AT 119062 T 15/03/1995 DE 68921458 D,T 09/11/1995 EP 0380605 A,B 08/08/1990 SE 0380605 T3 JP 2504677 T 27/12/1990 SE 8802126 D 00/00/0000 WO 8911898 A 14/12/1989 |
| US | 5856616 | A | 05/01/1999 | NONE |
| EP | 1203953 | A2 | 08/05/2002 | CA 2360863 A 01/05/2002 JP 2002139484 A 17/05/2002 US 6780314 B 24/08/2004 US 20020050470 A 02/05/2002 US 20050000874 A 06/01/2005 |